

AMENDMENT AFTER FINAL
August 21, 2006

TUC920030082US1
Serial No. 10/644,209

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of testing storage media in a storage device, said method comprising the steps of:

- a) inserting a physical storage volume into an input area in a storage device;
- b) scanning an input area on said physical storage volume;
- c) moving said physical storage volume to a drive capable of testing storage media in said physical storage volume;
- d) testing said storage media; and
- e) returning tested said physical storage volume to said input area, wherein tested said storage media are tested without being inserted into a library database for said storage array.

2. (original) A method of testing storage media in a storage device as in claim 1, wherein the step (a) of inserting said physical storage volume comprises the steps of:

- i) selecting storage media for test;
- ii) selecting an input area for inserting said physical storage volume;
- iii) inserting said physical storage volume into said selected input area; and,
- iv) waiting to start testing.

3. (original) A method of testing storage media in a storage device as in claim 2, wherein the step (a) of inserting said physical storage volume further comprises the step of:

- v) determining whether a library manager is in automatic mode.

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4. (original) A method of testing storage media in a storage device as in claim 3, wherein the step (a) of inserting said physical storage volume further comprises the step of:

v) indicating that said library manager must be in automatic mode before proceeding to scanning step (b).

5. (original) A method of testing storage media in a storage device as in claim 1, wherein the step (b) of scanning the input area further comprises queuing scanned physical storage volumes for testing.

6. (original) A method of testing storage media in a storage device as in claim 1, wherein the step (c) of moving said physical storage volume comprises fetching a test media command and moving said physical storage volume responsive to said test media command.

7. (original) A method of testing storage media in a storage device as in claim 1, wherein the testing step (d), further comprises:

i) determining if additional physical storage volumes are inserted for testing; and,
ii) returning to moving step (c) for testing any remaining inserted said physical storage volumes.

8. (currently amended) A method of testing storage media in a storage device as in claim 10 [[1]], wherein ~~step (f) of said storage media in said physical storage volume tested in step (e) is tested without inserting logical volumes on tested said storage media into said [[a]] data library comprises loading said storage media into a configuration database.~~

9. (original) A method of testing storage media in a storage device as in claim 1, wherein test results are reported to an operator.

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10. (original) A method of testing storage media in a storage device as in claim 1 further comprising the steps of:

f) inserting logical volumes on tested said storage media into a data library, inserted logical volumes in said data library being accessible by host devices.

11. (currently amended) A computer program product for testing storage media independent of inclusion in a data library, said computer program product comprising a computer usable medium having computer readable program code thereon, said computer readable program code comprising:

computer readable program code means for managing and administering data in a data library, data in said data library being stored on removable storage media;

computer readable program code means for scanning an input area on test storage media and queuing corresponding test media commands for scanned said test storage media;

computer readable program code means for selectively testing scanned said test storage media and indicating test results; and

computer readable program code means for moving tested said scanned removable storage media to an input area, wherein said tested storage media are tested without being inserted into a library database for said data library.

12. (original) A computer program product for testing storage media as in claim 11, wherein said computer readable program code means for selectively testing test media comprises:

computer readable program code means for selecting said scanned test storage media stored in said input area;

computer readable program code means for directing transport of selected said scanned test storage media from said input area to a media drive; and

computer readable program code means for testing media in said media drive.

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13. (original) A computer program product for testing storage media as in claim 12, further comprising:

computer readable program code means for determining whether all said scanned test storage media has been tested; and

computer readable program code means for selecting a next said scanned test storage media responsive to a determination that all said scanned test storage media have not been tested.

14. (currently amended) A storage subsystem for storing and administering data in a data library, said storage subsystem capable of testing removable storage media comprising:

a bulk input rack storing removable storage media inserted in a data library and test storage media;

a plurality of storage media drive units accessing data in a data library stored on said removable storage media;

an accessor selectively moving ones of said removable storage media and said test storage media to a selected one of said one or more drive units;

a visual input unit reading media identification information on selected said removable storage media and said test storage media; and

at least one of said plurality of storage media drive units testing a selected said test storage media.

15. (original) A storage subsystem as in claim 14, further comprising;

a virtual media server maintaining virtual drives and a virtual server database, said virtual drives containing library data from said removable storage media; and

a library manager controlling said accessor and maintaining a library manager database.

16. (original) A storage subsystem as in claim 15, wherein said library manager automatically selects and tests said test storage media.

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17. (original) A storage subsystem as in claim 14, further comprising an input/output (I/O) station for operator input.

18. (original) A storage subsystem as in claim 14, wherein said removable storage media and test storage media are magnetic tape on magnetic tape cartridges.

19. (original) A storage subsystem as in claim 18, wherein visual input unit is a bar code scanner scanning a bar code label on each of said magnetic tape cartridges.

20. (original) A storage system including a storage subsystem as in claim 14, said storage system connectable to a network and further comprising:

at least one host system interfaced with said storage subsystem;
a configuration database associating removable storage volumes in said storage subsystem coupled to said host system; and
a management database providing data management information for data on said removable storage volumes, each said selected test storage media being tested transparently to each said host system.